

INSIDE DEVELOPMENT | ENERGY

Gridworks: Why the UK is taking a risk on investing in power transmission in Africa

By *Sophie Edwards* // 21 November 2019

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Less than 40% of people in sub-Saharan Africa have access to electricity. Photo by: PublicDomainPictures (<https://pixabay.com/photos/alternative-cell-clean-ecological-21761/>) from Pixabay (https://pixabay.com/?utm_source=link-attribution&utm_medium=referral&utm_campaign=image&utm_content=21761)

LONDON — A new investment platform backed by the British government is channeling support to energy transmission and distribution in sub-Saharan Africa, which has traditionally been neglected by investors, experts say.

But they warned that producing bankable projects from these parts of the energy market will be a challenge.

Sustainable Development Goal 7 calls for universal access to affordable, reliable, and modern energy services by 2030, but sub-Saharan Africa lags far behind the rest of the world. Less than 40% of people in the region have access to electricity, falling to 20% in rural areas (<https://www.iea.org/statistics/>), and electricity consumption per head is approximately one-fifth of the global average.

“The real challenge for Gridworks is going to be the business model of the companies they finance.”

— Andrew Scott, head of climate and energy, ODI

The region also suffers from debilitating power cuts that reduce productivity and rack up additional costs for businesses forced to rely on expensive and polluting diesel-powered generators. And so, while 600 million (<https://www.iea.org/sdg/electricity/>) Africans are still off the grid, millions more are struggling to get by with minimal or unreliable power.

These problems have not gone unnoticed. Power Africa (<https://www.devex.com/organizations/power-africa-120105>), launched in 2013 by then-President Barack Obama, and the United Nations (<https://www.devex.com/organizations/united-nations-un-41567>)' Sustainable Energy for All (<https://www.devex.com/organizations/sustainable-energy-for-all-seforall-74227>) initiative are among the programs that have helped drive commitments for the African power sector.

But to date, most investment has focused on increasing generation capacity, leaving the distribution and transmission sector underinvested. As a result, some countries have found themselves with energy they cannot distribute. The government of Ghana, for example, is paying more than half a billion dollars every year (<https://drive.google.com/file/d/1obSdWq1woHs-IjK2HAz-UYKs7SlDjTym/view>) for electricity it is unable to use because the power grid cannot deliver it.

Read more on delivering energy in Africa:

- ▶ How individuals are investing in solar energy for Africa (<https://www.devex.com/news/how-individuals-are-investing-in-solar-energy-for-africa-95434>)
- ▶ Energy demand must increase in rural Africa to make mini-grids work (<https://www.devex.com/news/energy-demand-must-increase-in-rural-africa-to-make-mini-grids-work-95642>)
- ▶ Opinion: AfDB promised to light up and power Africa — now they must deliver (<https://www.devex.com/news/opinion-afdb-promised-to-light-up-and-power-africa-now-they-must-deliver-93792>)
- ▶ Can off-grid renewables close the energy access gap? (<https://www.devex.com/news/can-off-grid-renewables-close-the-energy-access-gap-92828>)

Starting now, according to McKinsey (<https://www.devex.com/organizations/mckinsey-company-24493>), nearly half of the \$835 billion (https://www.mckinsey.com/~media/McKinsey/dotcom/client_service/EPNG/PDFs/Brighter_Africa-The_growth_potential_of_the_sub-Saharan_electricity_sector.ashx) worth of investment required by 2040 to meet Africa's growing energy demands will need to be spent on transmission and distribution.

To help address this problem, the U.K.'s development finance institution, the CDC Group (<https://www.devex.com/organizations/cdc-group-112456>), has committed an initial \$325 million to a new venture, Gridworks, which is tasked with investing in and modernizing existing electricity infrastructure.

The CDC-capitalized company will also back new models, including off-grid energy (<https://www.devex.com/news/can-off-grid-renewables-close-the-energy-access-gap-92828>), to improve the quality and reliability of the power that consumers receive. It aims to make energy

systems greener by reducing energy losses, helping power sectors transition away from burning fossil fuels, and stabilizing grid systems so that they can absorb more electricity generated from renewables.

The company, officially launched in June, has made one investment so far of \$7.5 million to Pan-African solar company Mettle Solar Investments (<https://www.devex.com/organizations/mettle-solar-investments-limited-132726>).

Shaun Githuku, Gridworks' business development manager, told Devex that while turning around existing utilities with financial and technical support will be its "bread-and-butter" work, the team also has plans to invest in building transmission lines to share electricity across borders.

The effort is part of CDC's new "market-shaping" investment strategy (<https://www.devex.com/news/q-a-how-to-make-money-work-harder-for-impact-95835>), which involves taking a "catalytic capital" approach in a number of nascent markets.

Energy experts welcomed the scheme for focusing on an important but "neglected" part of the power sector, according to Andrew Scott, head of climate and energy at the Overseas Development Institute (<https://www.devex.com/organizations/overseas-development-institute-odi-5376>), a London-based think tank.

But turning power distribution and transmission companies and utilities into bankable projects will not be easy, Scott said. In many countries, the grid is government-owned and tariffs are set by regulators, making it challenging for operators to charge enough to cover their costs, pay for maintenance and expansion, and make some profit, he explained.

"The real challenge for Gridworks is going to be the business model of the companies they finance," he said.

Other challenges include poor tariff collection in many countries, illegal connections that can siphon off as much as 10% of the generated electricity, and the politics and governance of the delivery of electricity services, which can lead to monopolies and corruption, according to ODI research (<https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/8332.pdf>).

Rachel Kyte, dean of The Fletcher School (<https://www.devex.com/organizations/the-fletcher-school-42086>) at Tufts University (<https://www.devex.com/organizations/tufts-university-18412>) and formerly the U.N. secretary-general's special representative for Sustainable Energy for All, said that she welcomed CDC's focus on transmission and distribution but that it was only one part of the solution. Countries need technical, regulatory, and managerial support as well as investment, she said.

"Helping modernize the grid and make distribution more effective is an important contribution in combination with a lot of other things that need to happen as well," Kyte told Devex.

With China now Africa's biggest energy investor and India an increasingly significant player, Kyte also called for greater dialogue and collaboration between the various bilateral and multilateral actors supporting sustainable energy and African leaders themselves to make sure they are working toward

the same theory of change. At the moment, some of them are going in different directions, with the World Bank (<https://www.devex.com/organizations/world-bank-group-38382>) supporting regional power pools to trade electricity across borders, while China is pushing high-voltage transmission lines, she said.

"We need to pull everyone together and get them sitting around a table ... asking the best way to support African Union (<https://www.devex.com/organizations/african-union-commission-au-45103>) countries to get where they need to be," Kyte said.

ABOUT THE AUTHOR



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